



FLEXCELL® STREAMER® *Fluid Shear Stress Device*

(cat. no. STR-4000)

Apply fluid shear stress to cells with laminar, pulsatile, or oscillating flow

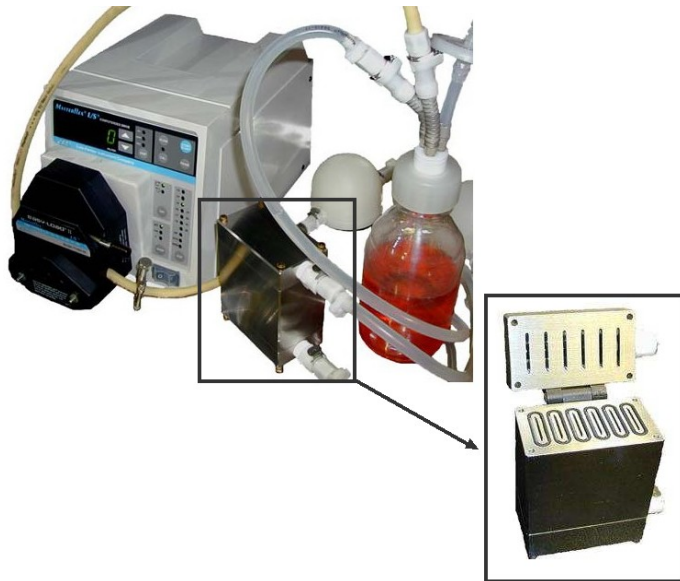


Figure 8. Image of Streamer system setup.

- Culture cells on special matrix coated PTFE rimmed 25 x 75 x 1 mm Culture Slips.
- Uses a computer-controlled peristaltic pump to regulate shear stress from 0 to 35 dynes/cm²
- Works with Osci-Flow flow controller to regulate oscillating and pulsatile flow.
- Analyze effects of fluid flow on cell alignment, mRNA and protein expression, and signaling pathways.
- Remove quick disconnect fittings for easy cleaning after use.
- Streamer device is autoclavable.
- Run up to six slides at one time.
- Comes with two pulse dampeners.

Applied Flowrate vs. Shear Stress

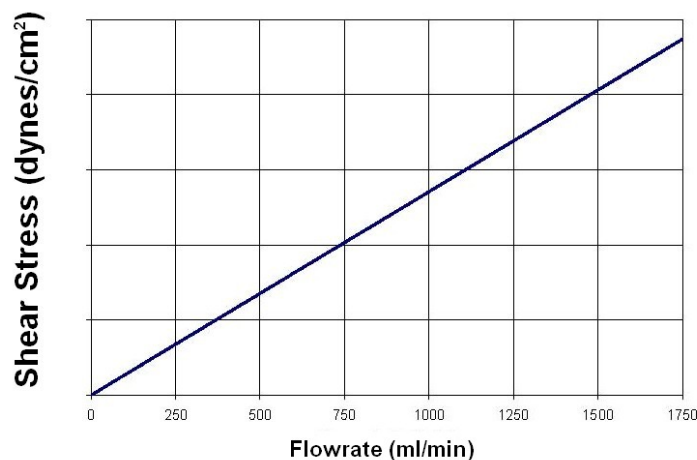


Figure 9. Representative graph of applied fluid shear stresses for a given pump flow rate for cells cultured on Culture Slips and placed within the Streamer device.

Streamer System includes:

- Streamer device
- Dell notebook computer
- Tubing and quick disconnects
- Peristaltic pump
- StreamSoft software
- Two pulse dampeners
- 12 Culture Slips